CLAIMS

What is claimed is:

1.   A computer implemented method for processing an order within a network, comprising:

receiving an order at an initial gateway, the order having a plurality of fields associated therewith;

ascertaining a chain of a plurality of gateways for processing at least a portion of the order, the chain of gateways identifying a sequence in which the gateways are configured to process the order;

identifying a first gateway in the chain of gateways, the first gateway being adapted for processing a first set of one or more fields of the order;

identifying a second gateway in the chain of gateways, the second gateway being adapted for processing a second set of one or more fields of the order;

passing the first set of fields to the first gateway; and

passing the second set of fields to the second gateway, thereby enabling the first and second gateways to separately process at least a portion of the order.

2.   The method as recited in claim 1, wherein passing the first set of fields and the second set of fields is performed from a calling gateway, and passing the second set of fields is performed prior to completion of processing of the first set of fields by the first gateway, thereby enabling the first and second gateways to simultaneously process at least a portion of the order.

3.   The method as recited in claim 1, wherein the first gateway is associated with a first business location and the second gateway is associated with a second business location.

4.   The method as recited in claim 1, wherein the first gateway is associated with a first department within a business location and the second gateway is associated with a second department within the business location.

5.   The method as recited in claim 1, wherein the calling gateway is one of the plurality of gateways.

6.   The method as recited in claim 1, wherein the calling gateway is the initial gateway.

7.   The method as recited in claim 1, wherein each of the plurality of gateways in the chain of gateways is linked to one or more of the plurality of gateways.

8.   The method as recited in claim 1, wherein at least one of the first and second gateways has an associated set of one or more conditions that must be fulfilled prior to passing the associated set of fields to the corresponding gateway.

9.   The method as recited in claim 8, wherein the set of one or more conditions depend upon the content of the order.

10.   The method as recited in claim 9, wherein the content of the order includes at least one of order quantity, customer, name, customer address, credit card type, card expiration date, item ordered, quantity of item ordered, item price, and total price of items ordered.

11.   The method as recited in claim 1, wherein the first set of fields is equivalent ot the second set of fields.

12.   The method as recited in claim 1, wherein the first set of fields is different from the second set of fields

13.   The method as recited in claim 1, wherein at least one of the first set of fields and the second set of fields are subsets of the order.

14.   The method as recited in claim 1, wherein when at least one of the first and second gateways does not have an associated set of one or more conditions that must be fulfilled prior to passing the associated set of fields to the corresponding gateway, the associated set of fields includes all fields in the order.

15.   The method as recited in claim 8, wherein the set of one or more conditions correspond to at least one of an order item, order characteristics, location from which an order item is to be processed, customer profile, and payment method.

16.   The method as recited in claim 8, one or more of the plurality of fields having a field indicator identifying the field within the order, the method further comprising:

        obtaining one or more field values corresponding to the set of conditions using the associated field indicators; and

        determining from the obtained field values whether the set of conditions is fulfilled.

17.   The method as recited in claim 16, wherein each field indicator identifies a field position within the order.

18.   The method as recited in claim 16, wherein each field indicator identifies a field name.

19.   The method as recited in claim 1, wherein the chain of gateways is represented by one or more gateway tables, each of the gateway tables associating a gateway with one or more linked gateways that are configured for processing upon completion of processing by the gateway.

20.   The method as recited in claim 19, wherein each of the linked gateways is associated with a status indicating that the gateway is pending, processing or done processing.

21.   The method as recited in claim 8, wherein the set of conditions requires that the corresponding gateway wait for completion of processing of a set of one or more processing gateways.

22.   The method as recited in claim 1, wherein the chain of gateways is defined through a customizer module.

23.   The method as recited in claim 1, wherein the chain of gateways is modifiable.

24.   The method as recited in claim 1, wherein the chain of gateways is defined by a business through which the order is to be processed.

25.   The method as recited in claim 8, wherein the set of conditions is defined through a customizer module.

26.   The method as recited in claim 8, wherein the set of conditions is modifiable.

27.   The method as recited in claim 8, wherein the set of conditions is defined by a business through which the order is to be processed.

28.   A computer implemented method for processing an order within a network, comprising:

receiving an order at an initial gateway, the order having a plurality of fields;

ascertaining a chain of a plurality of gateways for processing the order, the chain of gateways identifying a sequence in which the gateways are configured to process at least a portion of the order;

identifying a gateway in the chain of gateways for processing a set of one or more fields of the order such that the set of fields can be passed to the identified gateway, the gateway having an associated set of one or more conditions that must be fulfilled prior to passing the associated set of fields to the identified gateway;

determining whether the conditions associated with the identified gateway are fulfilled; and

passing the set of fields to the identified gateway when it is determined that the conditions associated with the identified gateway are fulfilled, thereby enabling the identified gateway to process at least a portion of the order.

29.   The method as recited in claim 28, wherein the set of one or more conditions depend upon the content of the order.

30.   The method as recited in claim 29, wherein the content of the order includes at least one of order quantity, customer, name, address, credit card type, card expiration date, item ordered, quantity of item ordered, item price, and total price of items ordered, a catalog identifier, supplier discount offers, supplier promotional information, tax rate, and shipping details.

31.   The method as recited in claim 28, wherein the set of one or more conditions correspond to at least one of an order item, order characteristics, location from which an order item is to be processed, customer profile, and payment method.

32.   The method as recited in claim 28, wherein the set of conditions is modifiable.

33.   The method as recited in claim 28, wherein the set of conditions is defined by a business through which the order is to be processed.

34.   A computer implemented method for processing an order within an network, comprising:

        receiving an order at an initial gateway, the order having associated order information;

        ascertaining a chain of a plurality of gateways for processing the order, the chain of gateways identifying a sequence in which the gateways are configured to process at least a portion of the order;

        examining gateway information associated with the chain of gateways to identify one or more gateways that are available for processing; and

        passing at least a portion of the order information to the identified available gateways, thereby enabling the identified available gateways to process at least a portion of the order.

35.   The method as recited in claim 34, wherein examining the gateway information comprises:

        determining whether one or more gateways in the chain of gateways have one or more conditions associated therewith that must be fulfilled prior to accessing the associated gateway; and

        ascertaining whether the conditions are fulfilled.

36.   The method as recited in claim 34, the gateway information indicating a status for each one of the plurality of gateways, the status indicating whether the

corresponding gateway is available for processing.

37.   The method as recited in claim 36, wherein when the status indicates that a corresponding gateway is available for processing, the gateway has no conditions that must be fulfilled prior to accessing the gateway or the gateway has one or more conditions that have been fulfilled.

38.   The method as recited in claim 36, wherein the chain of gateways is defined by a business through which the order is to be processed.

39.   The method as recited in claim 36, further comprising:
        associating a pending status with the initial gateway such that a new order can be received by the initial gateway.

40.   The method as recited in claim 36, further comprising:
        marking a status of the identified available gateways as processing.

41.   The method as recited in claim 36, further comprising:
        passing at least a portion of the gateway information to the identified available gateways.

42.   The method as recited in claim 36, wherein the gateway information is represented by one or more gateway tables, each of the gateway tables associating a gateway with zero or more linked gateways, each of the linked gateways being associated with a status.

43.   The method as recited in claim 42, wherein the gateway associated with the one or more linked gateways has a status associated therewith.

44.   The method as recited in claim 42, wherein passing at least a portion of the gateway information to the identified available gateways comprises:
        passing one of the gateway tables to each of the identified available gateways.

45.   The method as recited in claim 42, wherein the status indicates that the gateway is pending, processing or done processing.

46.   The method as recited in claim 45, wherein examining gateway information associated with the chain of gateways to identify one or more gateways that are available for processing comprises:
        sweeping the gateway tables to identify one or more gateways having a pending status.

47.   The method as recited in claim 46, wherein examining gateway information associated with the chain of gateways to identify one or more gateways that are available for processing further comprises:
        determining whether each of the identified gateways is available to process an event.

48.   The method as recited in claim 34, wherein the order information is stored in one or more process manager tables.

49.   The method as recited in claim 48, further comprising:
        populating the process manager tables with the order information after receiving the order.

50.   The method as recited in claim 48, wherein passing at least a portion of the

order information to the identified available gateways comprises:

identifying one or more parameters of each of the identified available gateways;

obtaining the identified one or more parameters for each of the identified available gateways from the one or more process manager tables; and

passing the obtained parameters to the identified available gateways.

51.   The method as recited in claim 48, further comprising:

when one of the identified available gateways modifies the order information, storing modified order information in the process manager tables.

52.   The method as recited in claim 36, further comprising:

modifying the status of the current processing gateway to done.

53.   The method as recited in claim 44, further comprising:

for each of the linked gateways in the gateway table, determining whether one or more conditions must be fulfilled prior to accessing the linked gateway; and

for each of the linked gateways determined to have one or more conditions associated therewith, determining whether the conditions are fulfilled.

54.   The method as recited in claim 53, further comprising:

for each of the linked gateways not having one or more associated conditions and for each of the linked gateways for which the associated conditions are fulfilled, creating a new gateway table and marking the status of the linked gateway as pending.

55.   The method as recited in claim 53, wherein the one or more conditions depend upon the content of the order.

56.   The method as recited in claim 53, wherein the one or more conditions associated with a linked gateway correspond to at least one of an order item, order characteristics, location from which an order item is to be processed, customer profile, and payment method.

57.   The method as recited in claim 53, wherein the one or more conditions associated with a linked gateway requires that the linked gateway wait for completion of processing of a set of one or more processing gateways.

58.   The method as recited in claim 53, wherein the conditions are defined by a business through which the order is to be processed.

59.   A computer implemented method for processing an order by a receiving gateway within a network, comprising:

        obtaining gateway information associated with the order, the gateway information indicating a status for one or more linked gateways, the status indicating whether the linked gateway is available for processing upon completion of processing of an associated processing gateway;

        examining a set of conditions associated with each of the linked gateways to identify one or more of the linked gateways that are available for processing; and

        updating the gateway information associated with the processing gateway and the linked gateways.

60.   The method as recited in claim 59, wherein the receiving gateway is an acknowledging gateway.

61.   The method as recited in claim 59, wherein the receiving gateway is the

processing gateway.

62.   The method as recited in claim 59, wherein obtain gateway information comprises receiving the gateway information from the processing gateway.

63.   The method as recited in claim 59, further comprising:
        when the processing gateway modifies the order information, storing the modified order information.

64.   The method as recited in claim 59, wherein updating the gateway information comprises:
        modifying the status of the processing gateway to done.

65.   The method as recited in claim 59, wherein examining a set of conditions associated with each of the linked gateways to identify one or more of the linked gateways that are available for processing comprises:
        for each of the linked gateways, determining whether one or more conditions must be fulfilled prior to accessing the linked gateway; and
        for each of the linked gateways determined to have one or more conditions associated therewith, determining whether the conditions are fulfilled.

66.   The method as recited in claim 59, wherein the gateway information is represented by one or more gateway tables, wherein updating the gateway information comprises:
        for each of the linked gateways not having one or more associated conditions and for each of the linked gateways for which the associated conditions are fulfilled, creating a new gateway table and marking the status of the linked gateway as pending.

67.   A computer-readable medium for processing an order within a network, the computer-readable medium storing thereon the following instructions:

instructions for receiving an order at an initial gateway, the order having a plurality of fields associated therewith;

instructions for ascertaining a chain of a plurality of gateways for processing at least a portion of the order, the chain of gateways identifying a sequence in which the gateways are configured to process the order;

instructions for identifying a first gateway in the chain of gateways, the first gateway being adapted for processing a first set of one or more fields of the order;

instructions for identifying a second gateway in the chain of gateways, the second gateway being adapted for processing a second set of one or more fields of the order;

instructions for passing the first set of fields to the first gateway; and

instructions for passing the second set of fields to the second gateway, thereby enabling the first and second gateways to separately process at least a portion of the order.